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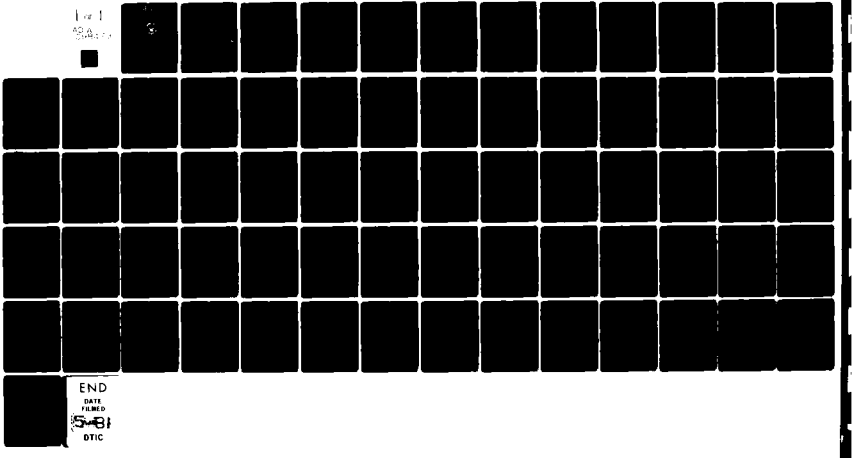

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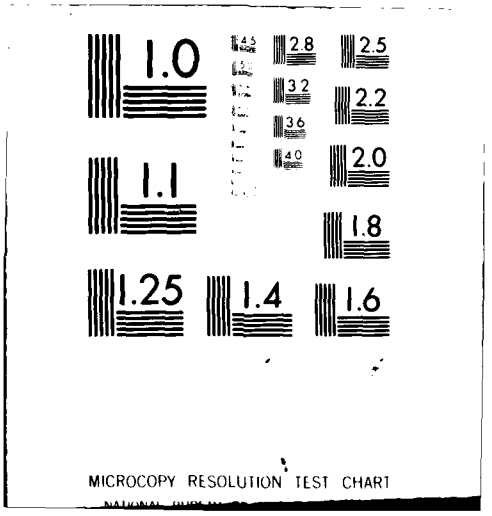
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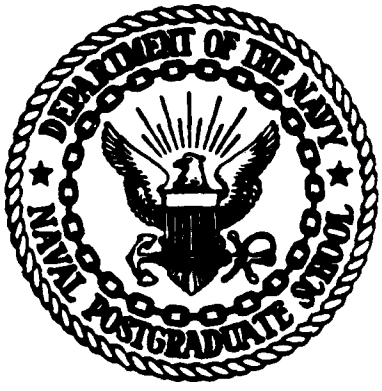

THESIS

QUALIFIED AIRCRAFT HANDLERS:
A STUDY OF THE UTILIZATION AND PLACEMENT
OF TRAINED PERSONNEL IN NAVAL AVIATION UNITS

by

Michael R. Clements

December 1980

Thesis Advisor: Richard S. Elster

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Qualified Aircraft Handlers:
A Study of the Utilization and Placement
of Trained Personnel in Naval Aviation Units

by

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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

In many instances, the utilization of trained naval personnel outside their specialty is inevitable, and the resulting skill deterioration in that specialty and necessity for re-training is also inevitable. The unnecessary utilization of trained personnel out-of-rating, however, must be controlled to combat rising training costs and attain maximum possible training efficiency and trained manpower availability.

There is no single aviation rating that performs all the duties and tasks for which the Plane Captain branches of Line Divisions of naval aviation units are responsible. This thesis reviews the current methods utilized to man the Plane Captain branches of these Line Divisions, discusses the advantages and disadvantages, and reviews the alternatives to correct this manning dilemma that have been proposed to date. It then presents a new proposal to modify the current Line Division manning practices in order to decrease the utilization of trained personnel out-of-rating and improve the efficiency of the naval aviation maintenance work force.

TABLE OF CONTENTS

I. INTRODUCTION

The world of aviation has been in existence for over seventy years, and almost concurrently, naval aviation has progressed from the days of canvas framed aircraft with bi-cycle tires and wooden propellors to highly sophisticated, supersonic airborne weapons systems. These modern aircraft are capable of performing various roles such as air-to-air combat, ordnance delivery, close-air support for ground troops, anti-submarine warfare, and early airborne warning, just to name a few. Even in this day and age of complex technology, however, naval aviation units are still utilizing archaic methods of placement and utilization of trained manpower to produce qualified aircraft handlers responsible for the numerous tasks associated with the servicing, inspecting, launching and recovering of aircraft both ashore and afloat. These handlers, commonly called Plane Captains, along with supervisory personnel not necessarily qualified as Plane Captains, comprise the Line Division of naval aviation units.

Line Division personnel are designated and non-designated paygrade E-3 and below personnel along with paygrade E-4 and above personnel. Those personnel who are designated have aviation ratings which they obtained by successful completion of Class "A" school or by completion of Personnel Qualification Standards and satisfactory scores on advancement examinations. Some examples of aviation ratings are Aviation Mechanic (AD),

Aviation Metalsmith (Hydraulics or Structure) (AMH or AMS), and Aviation Electrician (AE). In general, the Line Divisions of typical naval aviation squadrons are comprised of AD's, AMS's, AMH's and AE's who serve Temporary Additional Duty (TAD) assignments or in the Line Division anywhere from twelve to eighteen months prior to being assigned to the work center associated with their rating. This out-of-rating assignment, although it does have its advantages, has considerable drawbacks, and numerous reports and studies have concluded that a solution to this problem must be found.

A. PROBLEM

As the technology of naval air warfare has increased in complexity, the difficulty in training and maintaining a sailor's skills and proficiency has become increasingly evident. This difficulty has been accentuated by increases in the rate of technology change, and by the constant shuffling and reshuffling of manning levels. In naval aviation squadrons, a number of personnel who have received considerable formal training are being utilized in the Line Division where they are performing tasks not necessarily associated with their formal training. This out-of-rating assignment is not consistent with the man's chosen field in naval aviation, and can, and often does, lead to disillusionment and lower morale. In addition, skill retention becomes a problem as the amount of time increases in which the sailor does not utilize his learned skills. Another problem is that a sailor who is

serving his first enlistment and is assigned to the Line Division upon reporting to his first operational unit, often serves less than two years working in his chosen rating prior to the end of his service obligation.

B. PURPOSE

In any naval aircraft community, problems such as lack of spare parts, maintenance requirements, and shortages of trained personnel pose a serious threat to naval air warfare operations. By adding the practice of utilizing personnel out-of-rating in Line Divisions, very significant ramifications have and will continue to result if the current situation is not rectified. It is the purpose of this research to propose a possible method by which naval aviation units may man their respective Line Divisions with at least a majority of personnel recruited and trained to accomplish Line Division responsibilities.

C. BACKGROUND

Out-of-rating tours of duty are not uncommon in naval aviation and their damaging side effects have long been recognized. The utilization of designated personnel in Line Divisions has been the topic of several studies and reports over the past ten years, and all have concluded that it is a situation which requires correction. The two most extensive studies were the Carrier Aircraft Support Study (CASS) completed with the McDonnell-Douglas Corporation in a consultant capacity in January 1972 and the Carrier Aircraft Maintenance

Support Improvement (CAMSI) Project, Part I completed in November 1972 and Part II in May 1973. In addition, several naval aviation squadrons have proposed the creation and implementation of changes to the manning procedures for Line Division personnel, and even though a proposal for the creation of the AF (Aircraft Maintenanceman) rating was approved through all levels up to the Chief of Naval Personnel in 1976, the procedures for manning Line Divisions have remained constant to the present time. [Ref. 1]

The proposal of a rating for Line Division personnel has again risen, and both Commander, Naval Air Forces, Atlantic Fleet (COMNAVAIRLANT) and Commander, Naval Air Forces, Pacific Fleet (COMNAVAIRPAC) are working to effect changes to the present system. It is hoped that this thesis will combine all past inputs into one compact package which will aid in the institution of changes to rectify the present Line Division manning dilemma.

II. PRESENT LINE DIVISION MANNING PROCEDURES

Proposals for changing the current system of manning Line Divisions of naval aviation units cannot be made without an in-depth review of the present procedures. Given a detailed review, the reader can better sense the inherent problems, and at the same time, see that there are also advantages to the current practices.

A. TRADITIONAL AIRMAN TRAINING

When a squadron receives a new man directly from the training pipeline, he will ideally be able to perform as an experienced and efficient worker. Unfortunately, this is rarely the case because the individual has received mostly theoretical instruction with little or no hands-on working experience on a specific type aircraft. Still, the Navy has attempted to train sailors to perform effectively, but all the training, although it may be technical in nature, is still very general when compared to the complexity and the specific peculiarities associated with a particular type aircraft.

A new recruit is detailed to recruit training where he undergoes an introduction to military life. Personal experience has shown the author that the recruit who is destined for the aviation field has two avenues to travel through the pipeline which eventually leads him to a squadron. The first avenue of travel sends the recruit to the Airman Apprentice

training program. Here he is introduced to the general structure and functions in the aviation maintenance field. This program commences immediately after completion of recruit training and is very general in content. Following Airman Apprentice training, he is detailed to a squadron via the local training activity. After the authorized leave period and allocated travel time required to reach the new duty station, the new airman reports to the Fleet Readiness Aviation Maintenance Personnel (FRAMP) training program. The FRAMP is the common point where the two avenues become parallel.

The second avenue sends the recently graduated recruit to a Class "A" school, which provides intensive training in a specific field of maintenance, but not to a specific type of aircraft. This training is conducted predominately by programmed texts, classroom lectures, and demonstrations, with little or no hands-on experience. When he has completed this course, he is authorized a leave period and travel time prior to arriving at the FRAMP.

The major difference between the "A" school and Airman Apprentice training avenues is that, once the airman completes "A" school, he becomes designated for a particular field such as AMS, AMH or AE. After attending the Airman Apprentice training, the airman is not designated to a specialty and will not know his specified field until he is actually assigned. Again, from personal experience of the author, this assignment is based upon the manning level of the squadron, the number

of personnel presently assigned and, largely, upon the person's personal desires.

At the FRAMP, the non-designated airman receives familiarization training for a specific type aircraft which encompasses handling, servicing, ground support equipment, and squadron organization. This is supplemented with practical job training. The designated airman receives the same package with an additional specified training course in his rating.

B. SELECTION OF LINE DIVISION PERSONNEL

Now that his pipeline training is complete, the new airman arrives at his ultimate destination, the squadron. His energies have been spent in training commands for the past several months, and he is now ready for a work center assignment. Unfortunately, the squadron is responsible for providing the supporting naval air station with personnel to work at support facilities requiring non-rated, non-supervisory assignments. In addition, the squadron is required to man their Line Division with sufficient personnel to carry out daily operating requirements which are addressed in Section C of this chapter. These personnel usually come from the newly reporting airmen who may or may not be designated. In general, however, seventy-five percent of all incoming E-3 and below personnel reporting to their first operational aviation unit are designated. [Ref. 2]

1. Prospective Plane Captains

Officers and senior petty officers in each naval aviation unit screen all incoming enlisted personnel who are reporting to their first command for possible assignment as Plane Captain (PC) trainees. Approximately twenty-eight to thirty E-4 and below personnel are required to properly man the typical Line Division of a twelve aircraft squadron. This number is predicated on two PC's per aircraft and an adequate allowance to cover military duties, leave, sickness, and temporary additional duty (TAD) assignments such as mess cooking, compartment cleaning, and schools.

In any case, the prospective PC's are chosen and assigned to the Line Division regardless of previous training, previous experience, personal aptitude, or personal desires. Once assigned, these personnel undergo "in-house," on-the-job training to become qualified Plane Captains. The time required for this process varies for each individual, but it normally takes three to five months. Qualification is based mainly upon successful completion of Personnel Qualification Standards (PQS) set forth in OPNAVINST 3500.34 and delineated squadron criteria which must at least meet, but may exceed PQS criteria. After completion of PQS and squadron requirements, the Plane Captain trainee is given a locally prepared and administered written examination. Upon passing the written examination, he then appears before a Plane Captain Selection and Examining Board for an oral examination. If

the trainee satisfies the Board, he is recommended for certification. Certification requires a service record entry, whereupon the trainee becomes a Qualified Plane Captain. Lack of certification, however, does not preclude his working on the Line Division performing Plane Captain duties.

2. Line Division Supervisors

Incoming E-5 and above personnel are also screened by officers and senior petty officers for possible assignment to the Line Division in supervisory roles. Normally, two E-5, two E-6, and one E-7 or above are required for these duties. Once again, the author's experience shows that assignment is normally made regardless of previous training, previous experience, personal aptitude, or personal desires, and in most cases, assignment is based upon work center excesses. Any work center which has one or more E-5 or above who is not essential to that work center's production effort is normally tapped to provide a supervisor to the Line Division. Also if the choice lies among two or more likely candidates, the least productive and often the least desirable person is assigned to the Line Division.

In any case, personal encounters by the author show that these selected personnel may or may not have had experience working as a Plane Captain. Even if they have had previous experience, it may or may not be in the same type aircraft. A Plane Captain's qualification is for a specific type aircraft, and it is not applicable to other aircraft types.

In addition, qualifications expire when a person transfers from a squadron, and unless he has kept his qualification current he must undergo training to requalify. Line Division supervisors must learn their duties from their predecessors during minimal turnover periods, from 'hands-on' experience, and from Qualified Plane Captains who are supposed to be working for them. From this investigator's experience, the majority of Line Division supervisors are not even qualified to sign-off PQS for Plane Captain trainees. That is usually the responsibility of the senior qualified Plane Captain in the division.

C. LINE DIVISION RESPONSIBILITIES

In order to better understand the process of training personnel to be qualified Plane Captains, one must understand the tasks and responsibilities which fall under the purview of the Line Division of a naval aviation unit. In general, the Line Division is responsible for all aircraft servicing and maintenance related tasks which are not assigned to other unit work centers. Indeed, this is an ambiguous definition open to a broad range of interpretations, but in practice it means all tasks for which a Visual Display System/Maintenance Action Form (VIDS/MAF) with a Job Control Number (JCN) is <u>not</u> initiated. This interpretation narrows the range of related tasks to a certain extent, but more specifically, it includes daily, pre-flight, and post-flight inspections. A daily inspection

is a general servicing inspection where the PC checks anywhere from twenty-five to fifty specific items depending on the type aircraft, but it includes checking fuel, oil and hydraulic fluid levels, aircraft lubrication, access panels, tires, brake pressure, and component installation. A pre-flight inspection is performed by the PC with the aircrew as they are preparing for a flight. Much of this inspection takes place as the engine(s) are running and the PC looks for possible hydraulic, fuel, or oil leaks, confirms proper movement of flight control surfaces, and checks for any possible external aircraft discrepancies which may make the aircraft unsafe for flight. During a post-flight inspection, a PC again checks for possible fluid leaks and also any external discrepancies which may have occurred during the flight. Many of the discrepancies discovered are corrected by the PC, but the ones beyond his capability are written up on VIDS/MAF's and assigned JCN's for the appropriate, responsible work center to correct.

In addition to aircraft inspections, the Line Division is responsible for all aircraft ground movement not under aircraft power and all servicing such as fueling, lubricating, and washing. The division is also responsible for aircraft security both ashore and afloat, which includes tieing down the aircraft with chains, installing wing locks and nose and main landing gear down-locks, and securing all aircraft access panels and covers.

This brief overview does not cover all the tasks for which the Line Division is responsible, but it does provide the reader with a basic understanding of the multiplicity and importance of the duties which the PC's must accomplish.

D. DISADVANTAGES OF PRESENT METHOD

The existing Plane Captain's training process has provided and does still provide competent personnel to achieve the objectives of the Line Division, but many deficiencies do exist. The first of these deficiencies to be discussed is the misutilization of personnel with previous training and skills in recognized aviation ratings by assigning them to Line Division billets. The choice of this deficiency as the first to be discussed was not made without considerable forethought. To the author, this single factor has the most extensive, degrading effects on the individual personnel and units concerned.

> The U.S. Navy, in fulfilling its mission, requires a tremendous amount of skilled manpower. A significant percentage of this population is frequently assigned outside their respective skill areas. The resulting skill deterioration incurred during these assignments affects the amount of retraining required to re-establish currency and insure fleet readiness. [Ref. 17]

Designated personnel selected for Plane Captain training and Senior Petty Officers assigned to supervisory/administrative billets in the Line Division have received considerable formal training and/or have gained valuable on-the-job experience and skills in their designated ratings. When assigned to the Line Division, these personnel are no longer performing

duties within their specialty. The major contributing factor to skill deterioration is nonutilization of learned skills. [Ref. 2] Thus, these trained, experienced individuals assigned to the Line Division are being subjected to an environment that is highly conducive to the loss of previously acquired training and skills. This causes much concern, and indeed,

> ... any senior petty officer reporting to a new command, presupposed to be an individual with a specialty skill, is certainly a surprise and suspect when it is learned his past assignment was as a Line Petty Officer. The personnel manning system should not contain such surprises for either the personnel or the units of aviation. [Ref. 11]

Skill retention studies have shown that retention variables can be separated into four major categories: (1) amount of training, (2) duration of retention interval, (3) task organization, and (4) task environment. Perhaps the most important factor in the prediction of retention of skills is the final level of skill acquisition prior to nonutilization. Skill deterioration will begin at the level of skill acquisition and continue at an unknown rate that is inversely related to the non-utilization time. [Ref. 9]

It is important to note that the steepest or fastest rate of forgetting occurs in the initial time frame. Thus, personnel assigned to the Line Division, even for a short period of time, suffer dramatically in skill retention. As time passes, the individual will eventually arrive at a residual skill level slightly higher than his original educational base before training began. However, at this point in time

the knowledge is most likely obsolete due to changes in technology, and state-of-the-art. [Ref. 16]

Organizations generally recruit individuals for specialized tasks. When an individual is utilized in some other way, he may view the redefinition of his job as a substantial departure from his expectations of the career he planned to pursue. This individual in the future may not perform well due to his inability to accept the redefinition. [Ref. 14]

In addition,

> ... whenever a person buys a new gadget, he is usually quite anxious to try it out and see whether it works. This is a perfect description of the employee that has just gone through a training program. He is anxious to find out whether all the information he has gathered as a result of the program can be put to use. If he is not able to utilize his newly acquired knowledge and skill, then much of the effort that was put into the training program will be wasted. This is the side of training that can be very frustrating to the employee. If he cannot use his training, he may become dejected and regress to a level of performance that is less efficient than his achievement was before he was exposed to the training. [Ref. 7]

Designated or rated personnel assigned to the Line Division also feel with some justification that their out-of-rating assignment is detrimental to their advancement and career opportunities. Plane Captain trainees must complete PQS for PC qualification, and in order to be advanced they must also meet their designated rating PQS or the PQS of their chosen rating, as in the case of strikers. Thus, the individual must do "double-duty" and complete Plane Captain PQS to receive adequate performance marks on evaluations, and he must

also meet PQS for a recognized rating to be recommended for advancement while assigned to the Line Division.

> Often, in spite of this assignment, the personnel who previously received "A" school training in an established rating structure do earn promotion to petty officer status in their original specialty, but they still feel the loss of shop experience adversely affects their future promotions. [Ref. 11]

There is no specific rating or NEC for a Plane Captain, and this is another deficiency in the present PC training process. There is no reward or incentive for a person to become a qualified PC. Again, through personal encounters with the situation, the author has found that a number of personnel assigned as Plane Captains or trainees do not want to be Plane Captains. It is a forced assignment to which they must adapt or rebel. Many do just enough to get by while thinking primarily of the future. They look forward to an assignment within their school or experience specialty, or possibly to the end of their enlistment. This is <u>not</u> saying that they will fail to do the job assigned; it is merely re-emphasizing that there is a problem of inadequate reward for the job assigned. [Ref. 11] The individual must be able to sense achievement and recognition. If this need is not met, then frustration and feelings of failure can occur which can cause both the individual and the organization to suffer. [Ref. 6]

> Organizations can endeavor to build commitment by placing employees in situations where they have opportunities to achieve goals that are personally meaningful to them. To the extent that the organization is seen by its members as a primary source of need satisfaction, attachment and commitment should increase. [Ref. 15]

Another deficiency in the present Plane Captain training process is inherent from the type of people entering the military service today as compared to the 1950's and 1960's when the draft was in effect. The draftee entered the military reluctantly, and he was subject to profound disillusionment after service entry. He accepted the military on its own terms and generally did what was expected of him. Today's youth who volunteer for military service see it as an alternative to possible limited options in civilian life. He regards the military in terms of "what can it do for me in the areas of skill training and education." If he chooses a recognized aviation rating and is assigned to the Line Division, his expectations are not met, and he is subject to disillusionment. If he is disillusioned, he often wants out of the service regardless of the type of discharge, even though he may later have regrets. [Ref. 15]

Another deficiency to be discussed is the high turnover rate and lack of professional continuity among the Plane Captains, the trainees, and the supervisors. A qualified PC remains in the Line Division until a replacement has been assigned and trained to take his position. Line division supervisors are often merely managers of time and people, and they do not know themselves the job their subordinates are required to perform. As a result, their replacements do not receive adequate training to understand the objectives of the division.

One of the most recent, and probably most thorough analyses of the Line Division dilemma was done by the COMNAVAIRLANT Aviation Safety Improvement Study Group. Since the Group's study focused on the genesis of the problem within the Line Division with such clarity, extracts of the Study are herewith quoted at length:

> Using selected data for the COMNAVAIRLANT A-7 community, we can see that "supervision" contributed in 50 percent of the overall incidents (aircraft mishaps on the ground and in-flight) and by examining functional work centers, that is airframes through power plants, supervision contributed in 62.5 percent. The Line Division earns a separate color to underscore the fact that plane captains have final authority for job completion during pre-flight and post-flight inspections. Thus, the relatively small supervisory error is attributable to the fact that there is relatively little supervision. This is management by exception with the most unexperienced and least trained personnel having the final authority to certify for the maintenance department to a pilot that the aircraft is ready for flight. [Ref. 4]

> Further, we find that the Line Division, usually comprised of mechanical ratings plus non-designated strikers and sometimes augmented by excess AT's and AQ's, is a major causal factor in maintenance related incidents. For all COMNAVAIRLANT aircraft it is third, while in first-line carrier aircraft the Line has the second highest incident rate. [Ref. 4]

It is generally agreed that the Navy, of necessity, loses a tremendous amount of the valuable time of its trained personnel because of such housekeeping duty assignments as compartment cleaning, mess cooking, building and yard cleaning and maintenance. [Ref. 2] What is not as widely recognized is that the Navy unnecessarily wastes a large amount of its training investment because of its present personnel policies

in the Line Division, principally the power plants, airframes, and avionics divisions.

> Because the Line Division is considered out-of-rate, assignments are temporary in nature. The identified striker spends an average of 6.5 months and the unidentified striker 9.3 months in line duty assignments. As a result of employing temporary workers, the Line Division experiences almost a 100 percent turnover rate of its non-rated men every seven to eight months. This high rate of turnover drastically reduces the efficiency and safety of the Line Division and requires them to devote much of their time to on-the-job training. [Ref. 4]
>
> The study group interviewed all the available first term AD/AM personnel in the power plants and airframes shops of two A-7 squadrons and found out that they had spent an average of 10.6 months (including housekeeping and line/plane captain assignments) in their first operational command before they were employed in the functional area for which they were trained. Thus we have non-rated personnel who have little aviation experience performing functions that are of the utmost importance to aviation safety, for example, final inspections, servicing, and handling aircraft. [Ref. 4]
>
> To estimate the impact the Line Division personnel policies have on the power plants and airframes divisions, consider that the avarage AD/AM spends approximately 12 weeks in Class "A" school, 12 weeks in FRAMP training, plus another five weeks of leave and travel before reporting to his first permanent duty station. He is, therefore, usually in paygrade E3 when he reports. Since the time-in-grade requirement for advancement to paygrade E4 is only six months and the average non-rated AD/AM spends seven to eight months in the Line Division, it is obvious that the average AD/AM is trained, certified to be qualified, and advanced to petty officer third class by the senior petty officers available in the Line Division at the time. Thus the supervisors in the power plants and airframes divisions do not exercise any meaningful influence over the training of their apprentices. Rather they receive them from the Line certified as competent petty officers even though in many cases the AD/AM3 has never spent one day in the shop. <u>All the records of the Navy show them to be skilled workers when they are, in reality, still apprentices</u>. [Ref. 4]

> If 17% of the maintenance work force is rotated through a seven to nine month tour of duty in the Line Division, the result will be an enormous ripple of instability throughout the shops that provide and receive men from the Line Division. It follows then that to stabilize the work force of the Line Division is to stabilize the work force of all the shops that rotate personnel throughout the Line Division. If on the other hand, the tour length of Line transients were extended to, say 12 months to avoid increased instability, then this increased out-of-rate work may well backfire because of greater training inefficiencies. [Ref. 4]

E. ADVANTAGES OF PRESENT METHOD

In order to keep from painting too bleak of a picture of the present Line Division manning process, several good aspects must be noted. First, Line Division billets are recognized by senior petty officers and division officers as extremely important, critical billets which require hard physical labor and professional competence. These jobs are "where the action is." Line Division personnel are always present at launches and recoveries both ashore and afloat. Their work pace is hectic. Their days begin at least two hours before the first launch, and their days end not earlier than two hours after the final recovery. During carrier operations, this often turns into at least a twenty hour work day. Individuals doing excellent work are easily recognized and win respect and praise from aircraft crewmembers and supervisors.

The Line Division billets assign great responsibility to relatively young men who are working with contemporaries. They are responsible for multi-million dollar aircraft and

the lives of pilots and crew members. Line Division supervisors (E-5 and E-6) are responsible for twenty to thirty subordinates, an assignment and responsibility that is often not attained until the Chief Petty Officer level in other aviation work centers.

Assignment to the Line Division for E-4 and below provides the individuals with an all-around understanding and familiarity of the aircraft in a very short period of time. This knowledge enhances the sailor's skills when he is finally assigned to a work center compatible with his rating.

The following chapter addresses the alternatives that have been proposed to date to alleviate the problems addressed in Section D of this chapter.

III. PRESENT ALTERNATIVES

In recent years there have been several alternatives discussed or proposed to the Chief of Naval Personnel which were designed to eliminate or at least lessen the problems associated with the Line Division manning process. Maintaining the existing system is one alternative, but ample reasons were presented in Chapter II that indicate that the status-quo is considered unsatisfactory by a majority of the aviation maintenance community. Therefore, the status-quo will not be considered as a viable alternative. This chapter will outline different alternatives or proposals that have arisen to date, and will discuss the pros and cons of each.

A. ASSIGNING NEC'S TO LINE DIVISION PERSONNEL

One of the deficiencies associated with the present system which was discussed in Chapter II is that there is inadequate reward for the jobs being performed by Line Division personnel. In order to alleviate this situation, it could be possible to assign Navy Enlisted Classification (NEC) codes to personnel qualified as Plane Captains of a specific type aircraft. However, no advantages can be seen for this alternative because it represents no more than the status-quo with NEC's attached. This proposal fails to deal with the basic problems of the Line Division, and it is also germane that, under the existing system, Plane Captains are not usually re-toured to Line

Division duty. Most non-rated men would still be required to serve time as Plane Captains upon joining aviation units regardless of designation status, and these persons would eventually hold the NEC. Because few personnel are re-toured to other units as Plane Captains, the NEC would be useless as a detailing device. Therefore, this alternative has not been and is not considered a viable alternative. [Ref. 4]

B. ESTABLISHING A SERVICE RATING UNDER THE AD AND AM RATINGS

This proposal would create a service rating through the E-5 level under the AD and AM ratings. Personnel in this service rating would be designated as ADX or AMX, and they would be responsible for the duties of Line Division personnel, mainly Plane Captains. The ADX and AMX would both perform identical duties and would undergo similar if not identical training. At the E-6 level, these ratings would convert to AD, AMH or AMS ratings. If more senior level job requirements are identified for this service rating, the point at which they merge with the general ratings could be raised to the E-7 or higher level. Since members of this service rating would remain in the Line Division field for several tours of duty, NEC identification for specific type aircraft could be utilized for detailing purposes.

This proposal would create a highly skilled group of personnel with a thorough knowledge of Line Division responsibilities, and it would eliminate Line Division turnover as

a major source of maintenance personnel turbulence. Use of the Line Division as a dumping-ground for undesirables of all ranks could be prevented, and the potential for improving maintenance quality and safety record should be enhanced by bringing about a body of expertise in a previously neglected area.

An additional advantage is the reduction of training costs by eliminating the practice of sending "A" school graduates to the Line Division for lengthy periods, rather than to the jobs for which they were trained. It would also eliminate the present requirement to train almost all non-rated men as Plane Captains, and it would increase morale because few if any men would be assigned to the Line Division against their will.

Finally, this proposal affords more flexibility than the present practice of assigning only non-designated and general rating personnel to the Line Division. The AD and AM ratings at the E-6 level would benefit greatly from the broad experience gained through the ADX and AMX ratings, and the level at which the service rating merged into the general ratings could be controlled according to the increase or decrease in job requirements.

Although this proposal does appear attractive, it does have its drawbacks. Having the ADX and AMX ratings undergo similar training and perform identical duties through at least the E-5 level would most likely create additional

training requirements at the level where the service rating merges into the general ratings. This could create problems in the training pipeline and in the complexity of distribution between ADX and AMX. Also, the general ratings of AD and AM are controlled by different detailers in the Naval Military Personnel Command (NMPC), and this could cause turbulence when the service rating merges into the AD, AMH, and AMS ratings.

Additionally, this proposal does not meet the supervisory and management needs of the Line Division above the merger level for the service rating. Supervisors with general ratings who may or may not have Line Division experience would be assigned.

Finally, past experiences with service ratings under general ratings have proven that the working level Navy has had great difficulty in regarding the service rating as one requiring truly separate skills. For the aforementioned reasons, this proposal was also not considered to be a viable alternative. [Ref. 4]

C. ESTABLISHING A SERVICE RATING UNDER THE AM RATING ONLY

This approach is essentially the same as the preceding approach except that the service rating would fall under the purview of the AM rating only. The advantages of this approach are the same as before with the additional advantage being ease of management with only one general rating, one detailing desk, and a reduction in training pipeline problems.

Still, many duties of Plane Captains do fall under the general ratings of AD and AE as well as the AM rating. This is a disadvantage because individuals who have served as Plane Captains would merge into the AM rating (AMS or AMH) only, depriving the AD and AE communities of the knowledge, experience, and skills attained by serving in the Line Division.

This approach also was not considered to be an adequate solution to the Line Division manning dilemma. [Ref. 4]

D. ESTABLISHING A GENERAL RATING FOR LINE DIVISION PERSONNEL

This approach for easing the present Line Division manning problems has received the most attention of all proposals to date. This proposal revolves around the establishment of a general rating, Aviation Maintenanceman (AF) designed specifically to carry out Line Division duties and responsibilities. "The primary purpose of this action is to provide identification and career patterns for professional aviation maintenance personnel in the field of Line Division operations and management." [Ref. 12]

A general rating proposal for personnel performing Line Division duties and responsibilities was originally submitted by the Carrier Aircraft Maintenance Support Improvement (CAMSI) Project in 1973. [Ref. 5] A similar, subsequent proposal was made by ATTACK SQUADRON ONE SEVEN FOUR in August of 1976 and was forwarded recommending approval through all levels up to the Chief of Naval Personnel (CHNAVPERS). [Ref. 10] The Chief

of Naval Personnel, however, requested more research to be performed on the rating proposal. Two additional proposals were submitted by ATTACK SQUADRON ONE TWO EIGHT in February of 1979, and by ATTACK SQUADRON FORTY-TWO in April of 1979. [Ref. 11, 12 & 13]

These proposals entailed a rating structure with a progression from E-2 through E-8. It would begin with Class "A" school training and continue with enhancement at a local FRAMP prior to reporting to an aviation unit. Additional training at the squadron level would be via on-the-job training (OJT) and PQS at all levels. Advancement would be attained with successful completion of military requirements and satisfactory rate examination scores.

Plane Captain certification could be attained at the senior E-4 level, but most likely at the E-5 level. More senior personnel in the AF rating will have gained a thorough working knowledge of Line Division operations and responsibilities, and they would hold the supervisory and management positions of the division such as shift supervisor and Line Division Chief Petty Officer. In addition, billets in Quality Assurance, Maintenance Control, and the Safety Department could also be held by the senior AF's.

Establishment of the AF rating with full career progression from E-2 through E-8 would improve overall organizational manpower utilization and efficiency in a number of ways.

- An AF rating would eliminate out-of-rating assignments to the Line Division which could reduce skill deterioration and frustration of personnel who are concerned with advancement and career opportunities in their own specific rating.

- Completion of PQS for both Plane Captains and a chosen rating, as is necessary in the present system, would be eliminated.

- Personnel could be recruited specifically for the AF rating which would reduce the number of personnel who are disillusioned with the military because they are assigned to the Line Division and out of their chosen rating.

- The basic objective of training is to obtain maximum possible contribution from an individual in both the short and long run. Implementation of the AF rating with Class "A" school and FRAMP training would introduce the individual early to his job and work environment. The full career pattern from E-2 through E-8 would allow for continuous training which would produce personnel capable of contributing in all aspects and at all levels of the AF rating. [Ref. 3]

- The career pattern for the AF rating would reduce the Line Division personnel turnover at the junior paygrades, and supervisors will have gained knowledge and experience in the AF field which would enable them to provide more effective instruction to incoming personnel. [Ref. 7]

- More effective instruction reduces Plane Captain qualification time and benefits both the organization and the individual in performing their missions.

- Better training and better supervision should reduce aircraft maintenance mishaps by providing better qualified, professional aircraft handlers in the Line Division. [Ref. 8]

On the con side of the AF ratings, opponents of a specialized rating for Line Division personnel take the stance that there is not enough growth and career potential for E-6 and above personnel. Senior Petty Officers and Chief Petty Officers make rate by having expertise and experience in their field coupled with management and leadership ability. Opponents of the AF rating believe an AF1 or above would be nothing more than a senior qualified Plane Captain who has attained adequate time in service for advancement. He has enhanced responsibilities, but he does not have enhanced skills in proportion to his rank and, indeed, there is much truth to this argument. Senior personnel (E-6 and above) in the AF rating would have the increased responsibilities associated with supervisory billets, but their required technical skills are attained at the E-5 level on a particular type aircraft. Experience on one type aircraft or experience with different types of aircraft are important features of E-6 and above personnel, but unlike E-6 and above AMH, AMS, AD, or AE personnel, the senior AF personnel do not have higher technical skill levels required with advancement.

Through informal liaison with a number of people directly involved with the AF rating proposal, the author discovered that opposition was also raised because some tasks to be performed by junior AF personnel are delineated in the billet descriptions of junior AD, AM, and AE personnel. Separate ratings can not have identical task requirements in their billet descriptions. This would require billet descriptions for the junior AD, AM, and AE personnel to be rewritten and it could require justification for the existence of the AD, AM, and AE junior paygrades.

Another disadvantage is that the implementation of an AF rating would restrict squadron personnel assignment flexibility. Middle managers in squadrons utilize personnel, often on a day-to-day basis, in order to meet operational commitments. A specialized Line Division rating would preclude the use of AF's in many other work centers due to their lack of training and skills in other specialties.

In addition, it is desirable to have all aviation personnel familiar with Line Division procedures and line safety. A tour with the Line Division familiarizes a newly reporting individual with a very strong background in aviation safety and aircraft peculiarities which he will retain and utilize throughout his career. The AF rating would limit other ratings from attaining that background as quickly.

Finally, if it is agreed that dissatisfaction with the actual role of a Plane Captain exists, a separate rating may

not attract enough volunteers to man the proposed billets, and squadron managers would be in a dilemma created during the transition to the AF rating.

Although the proposal for an AF rating could solve many problems associated with the Line Division manning process, the disadvantages outweighed the advantages. To date, this proposal has not been accepted by CHNAVPERS.

IV. ENHANCED ABH RATING PROPOSAL

This chapter presents a new proposal for a possible solution to the present Line Division manning dilemma. This is not a proposal for an entirely new rating, but rather a proposal for the enhancement of duties of an already existent rating, Aviation Boatsman's Mate (Handler), to include those duties performed in Line Divisions of naval aviation units.

The traditional duties of the present junior ABH are those of the "yellow shirt" aboard aviation vessels. The ABH at present is responsible for all aircraft towing, spotting, and directing before, after, and during ship-board based flying operations. The expansion of his duties to include those in line operations of naval aviation units would expand the ABH rating in both number of personnel and scope of duties.

All subsequent references to the ABH rating, unless otherwise specified, will be to the enhanced ABH rating. The format of this proposal is in accordance with current guidelines for rating proposals to the Chief of Naval Personnel.

A. GENERAL INFORMATION

1. The title of the proposed rating is "Aviation Boatsman's Mate (Aircraft Handling and Servicing)" (ABH).

2. The ABH rating is a general rating.

3. Naval Aviation units require competent, professional personnel responsible for the overall supervision of mainten-

ance, inspection and servicing of aircraft before flight. The enhanced ABH rating will provide motivated personnel and highly qualified supervisors with the technical competence and professionally developed expertise necessary to accept this responsibility and manage a successful Line Division. The specialty of the ABH rating in the junior pay grades will be the Plane Captain, whose primary duties will be in the areas of inspecting, servicing, ground handling, and launching and recovery of naval aircraft. The shipboard counterpart will be the traditional junior "yellow shirt" who will carry out the duties currently specified in the ABH rating. After performance as a Plane Captain, middle level ABH personnel will have gained experience through exposure to all facets of Line Division operations, both afloat and ashore. They will have been trained through working knowledge on the aircraft systems and their functional interfaces, and they should develop into professional middle managers within the rating. Shipboard tours would be as crew leaders or supervisors who have the added expertise of having handled and serviced one of the aircraft of the Air Wing's complement.

4. Personnel qualifications should include average or above physical condition and mental ability, along with a mechanical aptitude, no fear of heights, and be eligible to obtain at least a Confidential security clearance. Personnel should also be volunteers for aviation duty and have 20/20 vision or vision correctable to 20/20 with normal color

perception. More exact data on qualification standards could be validated through research by the Navy Personnel Research and Development Center.

B. OCCUPATIONAL ASPECTS

The following is a breakdown of the enhanced tasks and duties the ABH will perform in accordance with his rate. All qualifications will be achieved via Personnel Qualification Standards (PQS) and on-the-job-training (OJT). In addition, this section spells out qualification times, skill levels to be achieved, formal training and OJT requirements.

1. Tasks and Duties Required by Rate

a. ABHAR/ABHAA

The ABHAR and ABHAA will be in training for certification as a second mechanic and aircraft handler. He will be eligible for all squadron temporary additional duty (TAD) assignments.

b. ABHAN

The ABHAN will be in training for certification as a second mechanic and should be qualified as an aircraft handler. Second mechanic training will be achieved through PQS and will encompass the following duties which are similar to the qualifications of present Plane Captains:

(1) Demonstrate practical knowledge of and be familiar with aircraft and their systems to properly perform daily/turn-around/special/conditional/preflight inspections either alone or in conjunction with assisting technicians.

Carry out or assist other personnel and production work centers in performing organizational maintenance. Become qualified to perform the following tasks:

(a) Service pneudralic landing gear struts.

(b) Change aircraft tires.

(c) Change exterior light bulbs.

(d) Change electronic components that can be reached from the outside of the aircraft.

(2) Assist aircrew with flight preparation, and be capable of apprising the aircrew of the material condition of the entire aircraft.

(3) Demonstrate and assist in aircraft prestart, start, poststart, point check, launch and recovery procedures.

(4) Be responsible for the cleanliness and detection of corrosion on an assigned aircraft, and assist in corrosion treatment and prevention.

(5) Demonstrate knowledge of ordnance/armament equipment, ejection and cartridge-activated devices, ensuring safe but ready condition on inspections.

(6) Be familiar with cockpit controls and systems utilized by ABH personnel.

(7) Be knowledgeable of fueling/defueling procedures.

(8) Be knowledgeable of technical publications on aircraft and demonstrate knowledge of tool control and FOD prevention directives and procedures.

(9) Be knowledgeable of security conditions of aircraft for weather and shipboard operations.

(10) Be knowledgeable of all aircraft handling procedures in and out of the cockpit including NATOPS requirements.

(11) Be able to identify aircraft ground safety devices, prepare aircraft for ground maintenance, and service and operate support equipment.

(12) Demonstrate the proper use of maintenance requirement cards and identify and complete maintenance action and support action forms.

(13) Demonstrate the proper use and maintenance of the basic handbook in accordance with existing tool control programs.

(14) Be able to act as a brake-rider, wing/tail/chock walker and tractor driver during aircraft moves.

(15) Be able to serve as a member of a Nuclear/Biological/Chemical (NBC) defense team, a damage control party or fire fighting party, and be able to operate portable fire fighting equipment.

(16) Be able to completely service aircraft. [Ref. 5, 11, 12]

The ABHAN will be in training for Plane Captain certification and exceptional personnel may attain Plane Captain certification at the E-3 level. He will also be eligible for all squadron TAD assignments.

c. ABH3

Plane Captain qualification should be achieved at the E-4 level. The complex and technical nature of current and future naval aircraft require highly skilled personnel who possess a comprehensive, professional knowledge of maintenance requirements. With sufficient exposure as a second mechanic, personnel will develop expertise in maintaining their aircraft and efficiency in their rating. This higher level of skill will enable the person to become qualified as a Plane Captain. An experienced Plane Captain may become a Collateral Duty Inspection (CDI) for line functions, a supervisor for aircraft handling and servicing, and an instructor to second mechanics and junior personnel. A Plane Captain will be fully qualified by PQS training and certified by a Plane Captain certification board. For final certification as a Plane Captain, the individual must be able to perform the following additional duties.

(1) Direct movement of aircraft during towing and taxiing evolutions.

(2) Supervise personnel during fuel, air, oil, and hydraulic system servicing, and other line maintenance functions.

(3) Perform daily, pre-flight, post-flight, turnaround and conditional inspections and prepare appropriate maintenance data and support data forms.

(4) Assist other rates in performing maintenance on aircraft.

(5) Maintain a technical library, interpret technical directives, and utilize technical publications.

(6) Assist in performing maintenance turn-ups on aircraft. Superior E-4 personnel may become qualified to start and turn-up aircraft.

(7) Supervise aircraft inspections and handling procedures, and coordinate the movement and readying of aircraft with line supervisory personnel.

(8) Inspect, maintain, and use aircraft handling, support, and safety equipment.

(9) Conduct fuel surveillance and corrosion inspections.

(10) Conduct all phases of training with assigned prospective second mechanics. [Ref. 5, 11, 12]

d. ABH2/ABH1

Prior certification as a second mechanic and Plane Captain will give E-5 and E-6 personnel the experience and knowledge of Line Division operations required to function as line crew and shift supervisor, troubleshooter branch supervisor, Quality Assurance Representative (QAR), and squadron Safety Petty Officer. The following additional qualifications should be achieved at the E-5 and E-6 levels:

(1) Maintain division tool control and Individual Material Readiness List (IMRL) programs.

(2) Ensure proper quantities of aircraft support supplies and be able to order same as necessary.

(3) Prepare division watch, quarter, and station bills.

(4) Maintain division training programs and records.

(5) Start, turn-up, and secure aircraft.

(6) Start and taxi aircraft for ground servicing and maintenance purposes. [Ref. 5, 11, 12]

This added expertise should continue to help ABH personnel develop and become eligible for the E-7 through E-9 pay grades. A superior ABH1 should be utilized as a QAR to ensure proper quality assurance overview and inspection of line division work operations. The Safety Department requires a representative knowledgeable of proper line safety procedures and practices. The enhanced ABH rating should be involved as much as any other aviation related rating in determining the proper and safest methods of working on and around aircraft, as well as the ground movement of aircraft and use of ground support equipment.

e. ABHC

ABH personnel should have gained an excellent background and invaluable experience as shift supervisors which will enable them to be qualified as Plane Captain branch or Troubleshooter branch supervisors at the E-7 level. He should be qualified to control Line Division actions of inspecting, readying, servicing, ground handling, launching, recovering,

and corrosion preventing of naval aircraft. In addition, his experience in Line Division Operations should provide the ABHC with the knowledge necessary to serve as Maintenance Control Chief.

f. ABCS

At the E-8 level, personnel will serve as Division Chief Petty Officer and/or flight deck coordinator, fully capable of supervising the entire division, handling all administrative matters, and interrelating squadron requests and actions to flight deck and hangar deck control on all carriers. They will be eligible for TAD assignment to squadron maintenance control or to hangar deck or flight deck control on carriers.

g. ABCM

By the E-9 level, the ABCM will be qualified to act as assistant Line Division Officer or Maintenance Control senior supervisor. They will also be eligible for any squadron TAD assignment requiring a Master Chief Petty Officer.

2. Qualification Times

The following section provides a brief description of the time required for personnel to attain qualifications or certifications within the ABH rating. These times are based on the author's experience with Line Division operations, and they could vary due to different types of aircraft and the individual persons involved, but they should provide general guidelines. Further research could more accurately predict qualification times.

a. ABHAR

Qualified personnel would be designated as an ABH upon successful completion of ABH "A" school which would include instruction in general principles of all aspects of aircraft systems.

b. ABHAA

Advancement to E-2 would be attained after graduation from Fleet Replacement Aviation Maintenance Personnel (FRAMP) and meeting of all current Navy qualifications for E-2.

c. Aircraft Handler

Designation as a qualified Aircraft Handler would require approximately 90 days of in-squadron OJT and completion of PQS.

d. Second Mechanic

Qualification as a Second Mechanic would require approximately three to six months of in-squadron OJT and PQS training.

e. Plane Captain

Certification as a qualified Plane Captain could occur after a minimum of six months as a second mechanic, PQS completion, and selection by a certification board. Plane Captain qualification would probably be attained as an E-4, but possibly at the E-3 level.

3. Skill Levels

Individual skill levels will increase as time in rate increases. Current and future naval aircraft will require

responsible personnel to perform maintenance tasks, and this responsibility must come at least partially from experience gained through PQS training and increased knowledge of how and why tasks are to be performed.

4. Work and Personnel Requirements

Section B1 of this chapter spells out work requirements for each pay grade. The number of personnel required for aviation units is spelled out in Section D of this chapter.

5. Formal Training Requirements

"A" school should be approximately 12 weeks and FRAMP should be approximately six to eight weeks long.

6. On-The-Job-Training Requirements

The on-the-job training requirements should be three to six months in training to qualify as a second mechanic and at least six months as a second mechanic to qualify as a Plane Captain. Aircraft handler OJT should take approximately 90 days. All of these qualifications could be via PQS and time lengths may vary slightly for individual qualification.

7. Duties and Tasks Requiring Formal Training

All tasks and duties of the rate from Plane Captain down should require formal training or at least introduction to the duties of an ABH during formal training.

8. Duties and Tasks Requiring On-The-Job Training

All tasks and duties of the rate, at all pay grades, should require OJT. The formal qualifications of aircraft handler, second mechanic and Plane Captain will be PQS

implemented and should require sufficient OJT to attain a professional level of performance. All supervisor duties and collateral duties should require the current Navy standards of OJT before such assignments can be made.

9. Utilization of Manpower

This rating will require a full day's work, consistently, aboard ship or ashore.

10. Chief Petty Officer Supervision

Paygrade E-7 through E-9 would be able to supervise the work of the entire rating. A professional development of skill ability and leadership could be achieved while progressing through the ABH pay grades. [Ref. 5, 11, 12]

C. RELATIONSHIP TO PRESENT RATING STRUCTURE

1. The ABH rating presently exists. The enhanced ABH rating would expand its scope to encompass all personnel servicing and handling aircraft.

2. There is no single rating that exists that performs the ABH duties and tasks.

3. No NEC exists for this duty. NEC's should be utilized and developed to denote important skills within the rating, and second mechanics, Plane Captains, and supervisors dealing with a particular aircraft type should receive the appropriate organizational maintenance NEC after completing FRAMP.

4. Presently, any aviation rating is able to be trained to do the current work of the ABH rating.

5. Aviation maintenance is the proposed occupational field to which the enhanced ABH rating would be assigned.

6. Commissions as warrant officer or limited duty officer in aviation boatswain and aviation maintenance fields would be made available for personnel in the ABH rating.

D. NUMBER OF BILLETS

This section will delineate the estimated number of additional personnel required for the ABH rating proposal. Although ABH personnel have been recommended to be utilized and should be utilized in other work centers of naval squadrons besides the Line Division, this thesis encompasses those billets required to man the Line Division only, and more specifically, Work Center 310, which is the Plane Captain branch of the Line Division. The following is the proposal for the changes to the Squadron Manning Documents (SQMD's) of the A-7E, A-6E/KA-6D, F-14/F-4, S-3A, E-2C, and EA-6B aircraft which are the major squadrons that routinely deploy on aircraft carriers. Special squadron detachments of aircraft which deploy aboard aircraft carriers, such as RF-8 detachments, are not included due to the small number of aircraft and personnel assigned while deployed. Helicopter squadrons, such as SH-3 and H-2 squadrons, are not included due to their particular nature where aircrewmen often perform Line Division tasks during flight operations. The P-3 community is also not included because sufficient numbers of ABH personnel are

currently designated in the P-3 SQMD to man Line Division billets of deploying P-3 squadrons. In addition, VQ, VR, VC, VX, and other special squadrons are not included in order to limit the scope of the proposal to those squadrons which would be most affected by the changes.

These changes, outlined in the following section, will delineate the additional number of sea duty billets required for the ABH rating proposal. The additional number of shore duty billets required will be delineated in Section D2.

1. Sea Duty Billets

A-7E FLEET SQUADRON

PRESENT		BILLET TITLE	PROPOSED	
ADCS	1	LINE DIVISION SUPERVISOR	ABCS	1
AMSC	1	PC SUPERVISOR	ABHC	1
AMH1	1	PC SUPERVISOR ASST	ABH1	1
AMS3	1	PC SUPERVISOR ASST	ABH3	1
AMH3	1	PC	ABH3	1
AMS3	1	PC	ABH3	1
AN	6	PC	ABHAN	6
AN	11	PC	AN	11

A-6E/KA-6D FLEET SQUADRON

PRESENT		BILLET TITLE	PROPOSED	
ADCS	1	LINE DIVISION SUPERVISOR	ABCS	1
ADC	1	PC SUPERVISOR	ABHC	1
AMH1	1	PC SUPERVISOR ASST	ABH1	1
AMS1	1	PC SUPERVISOR ASST	ABH1	1
AME2	1	PC SUPERVISOR ASST	ABH2	1
AD2	1	PC SUPERVISOR ASST	ABH2	1
AD3	2	PC	ABH3	2
AMS3	2	PC	ABH3	2
AN	10	PC	ABHAN	10
AN	15	PC	AN	15

F-14/F-4 FLEET SQUADRON

PRESENT		BILLET TITLE	PROPOSED	
ADCS	1	LINE DIVISION SUPERVISOR	ABCS	1
ADC	1	PC SUPERVISOR	ABHC	1
AMH1	1	PC SUPERVISOR ASST	ABH1	1
AMH2	1	PC SUPERVISOR ASST	ABH2	1
AD3	1	PC SUPERVISOR ASST	ABH3	1
AME3	1	PC	ABH3	1
AD3	1	PC	ABH3	1
AN	5	PC	ABHAN	5
AN	15	PC	AN	15

S-3A FLEET SQUADRON

PRESENT		BILLET TITLE	PROPOSED	
AECS	1	LINE DIVISION SUPERVISOR	ABCS	1
ADC	1	PC SUPERVISOR	ABHC	1
AMS1	1	PC SUPERVISOR ASST	ABH1	1
AMH2	1	PC SUPERVISOR ASST	ABH2	1
AD3	1	PC	ABH3	1
AMH3	1	PC	ABH3	1
AMS3	1	PC	ABH3	1
AN	6	PC	ABHAN	6
AN	13	PC	AN	13

E-2C FLEET SQUADRON

PRESENT		BILLET TITLE	PROPOSED	
ADC	1	LINE DIVISION SUPERVISOR	ABHC	1
AMH1	1	PC SUPERVISOR	ABH1	1
AD2	1	PC SUPERVISOR ASST	ABH2	1
AN	2	PC	ABHAN	2
AN	6	PC	AN	6

EA-6B FLEET SQUADRON

PRESENT		BILLET TITLE	PROPOSED	
AMHC	1	LINE DIVISION SUPERVISOR	ABHC	1
AMS1	1	PC SUPERVISOR	ABH1	1
AMH3	1	PC SUPERVISOR ASST	ABH3	1
AN	2	PC	ABHAN	2
AN	6	PC	AN	6

2. Shore Duty Billets

The additional number of ABH personnel required to man Work Center 310 of Line Divisions of shore squadrons was determined from a poll by this investigator of all Replacement Air Group (RAG) squadrons and all training command squadrons for fixed-wing aircraft. The individual squadron statistics for the poll are listed in Appendix A, and they are based on on-board personnel in these Line Divisions, not on individual SQMD's. In addition, they are not broken down by separate ratings, only aggregate numbers by pay grade, but they do exclude any ABH personnel presently assigned to these squadrons.

LINE DIVISION MANNING ASHORE BY PAYGRADE

E-8	E-7	E-6	E-5	E-4	E-3/2/1	TOTAL
9	30	45	48	175	944	1251

By utilizing the aforementioned figures for both sea and shore squadrons, and figures obtained from ABCM Donald L. Morris, ABH detailer for pay grades E-5 through E-9, on the number of current sea and shore billets for ABH personnel, Table I was constructed which displays the present and enhanced number of billets for ABH personnel.*

*All petty officer billets for the shore squadrons polled would be replaced by ABH petty officers. Thirty-five percent of all E-3/2/1 billets would be replaced by non-rated ABH personnel.

SEA DUTY BILLETS FOR ABH PERSONNEL

	PRESENT	INCREASE	ENHANCED
ABHC	146	88	234
ABH1	362	100	462
ABH2	400	68	468
ABH3	720	200	920
ABHAN	348	472	820
TOTAL	1976	928	2904

SHORE DUTY BILLETS FOR ABH PERSONNEL

	PRESENT	INCREASE	ENHANCED
ABHC	64	30	94
ABH1	102	45	147
ABH2	132	48	180
ABH3	178	175	353
ABHAN	126	330	456
TOTAL	602	628	1230

TABLE 1

3. Billet Compensation

All Work Center 310 petty officer billets in both sea and shore squadrons would be replaced by ABH petty officers. Approximately thirty-five percent of all E-3 and below Plane Captain billets would be replaced by ABH non-rated personnel. There would be no increase over existing SQMD's for either sea or shore squadrons.

E. GENERAL COMMENTS

This section is a brief summarization of the preceding proposal for the enhanced ABH rating. In addition, it will cover any nonspecific aspects of the proposed rating which were not addressed in the guidelines for a rating proposal. It is divided into two sub-topics which will delineate the advantages and disadvantages of this proposal.

1. Advantages

The ABH rating is a general rating which has full career progression from E-1 through E-9. It would apply to both peacetime and wartime periods, and there would be no basic change in structure during mobilization. Unlike the present system, a newly reporting ABH will have received considerable formal training in aircraft handling and servicing through "A" school and FRAMP prior to arriving at a naval aviation unit. He will not be disillusioned by being assigned to a billet outside of his specialty with the exception of inevitable ninety day TAD assignments to squadron housekeeping duties and supporting station mess cooking duties. He will work at his assigned rating, and through PQS and OJT, he will gain skills and experience enabling him to be advanced through the ABH pay grades. He will be able to obtain petty officer status in the aircraft handling area, and not in an area where he has not yet obtained the needed experience and expertise. Professional development and advancement while assigned to the Line Division will not only become available, but also

necessary once the ABH rating is enhanced. Each Line Division can train and qualify its personnel and ensure that professional growth opportunities are utilized. Career opportunities will be established and experienced supervisors may come from within the ranks of Plane Captains.

The necessity of assigning designated arimen with Class "A" school training in any other aviation related rating to the Line Division would be eliminated, thereby reducing inherent skill deterioration and disillusionment. Non-designated airmen and designated strikers could still be utilized in the Line Division which would allow management the flexibility to fill all squadron billets and provide a planning tool for ensuring that junior pay grades, who have not received formal Class "A" school instruction may be programmed into school billets. It will also provide the non-designated airman with a quick insight into the duties and responsibilities of all aviation ratings to help him determine which field he is most inclined to pursue. In addition, the requirement for designated personnel to fulfill PQS requirements in two different fields would be eliminated.

Junior ABH pay grades in the Line Division will receive supervision and instruction from personnel qualified and certified in all aspects of the rating. A Line Division would no longer be run by petty officers who may not have experience in the field of Line Operations. Senior petty

officers of the ABH rating should have gained sufficient experience and knowledge to supervise any tasks or train any of their personnel.

Line Division personnel turnover would be minimized, and a greater stability in the overall squadron maintenance work force could be achieved by the implementation of the ABH rating. Trained Line Division personnel would no longer be sent to the other work centers after a specific period of time requiring the training and qualification of new personnel as the personnel are rotated to other work centers. In addition, the majority of all squadron E-3 and below TAD requirements would not have to be taken from the Line Division.

Finally, the ABH rating presently exists. Personnel are not fully trained to perform all the enhanced rating specifics, but the only requirement is to enhance the existent training in the proposed ABH task areas. The enhanced rating will help to ensure that naval aircraft are fully ready for flight.

2. Disadvantages

The enhanced ABH rating proposal, although it does provide a number of solutions to present procedures, also has its drawbacks. The present rating is currently undermanned at all petty officer levels by five to ten percent at E-4, E-6 and E-7 paygrades, and by twenty-three percent at the E-5 level. The present sea-shore rotation for E-6 and below ABH personnel is 42 months sea duty for 24 months shore duty, and

this is largely due to a 3.3:1 ratio of sea duty billets to shore duty billets. The proposal does not create more shore duty billets than sea duty billets, but it does improve the ratio to 2.3:1. In addition, if the implementation of the enhanced rating is approved, qualified ABH personnel could be utilized to man transient line facilities at all Naval Air Stations. This would increase the number of shore duty billets available to the ABH rating, but it would reduce the number of shore billets for ratings presently assigned to transient line facilities.

Initial implementation would require an additional 800 non-rated personnel in the rating, and present ABH petty officers would have to be screened for enhanced training before being assigned to naval squadrons. Still, the enhanced rating should invoke a more attractive picture for recruiters to display to potential enlistees. It will increase the number of duty stations available and provide a greater variation in workload. In addition, even though duty with a sea-going squadron is considered sea duty, the rigors of shipboard or overseas life is encountered only while the squadron is deployed.

The enhanced rating proposal will also create some detailing problems. Personnel assigned to squadrons for sea or shore duty and then assigned to a ship for sea duty will inherently be behind their shipboard counterparts in experience and skill levels. The opposite is also true. An

individual assigned to a ship for a tour and then detailed to a squadron will also be behind his counterparts. This may result in some closed-loop detailing where personnel may alternate sea to shore or vice versa for three or more tours and never be assigned to a ship or to a squadron. Another problem is that personnel taking rating examinations may not have had the opportunity to experience duties and responsibilities covered on the examinations.

Finally, and perhaps most significantly, some duties and responsibilities of the junior personnel in the AD, AM, and AE ratings would be taken away and assigned to ABH personnel. This could cause a redefinition and a subsequent re-evaluation of the necessity of those ratings at the junior paygrades.

V. CONCLUSION

In many instances, the utilization of trained naval personnel outside their specialty is inevitable, and the resulting skill deterioration and necessity for re-training is also inevitable. [Ref. 2] As the technology of naval aircraft continues to become more complex with the almost daily modification and design of aircraft to meet future national defense scenarios, the requirement for more highly trained, technically competent, and experienced personnel also grows. The unnecessary utilization of trained personnel out-of-rating must be controlled to help combat rising training costs and attain maximum possible training efficiency and trained manpower availability.

The requirement for qualified personnel to perform the tasks associated with Line Division operations in naval aviation units has been in existence as long as naval aviation. Although this requirement is currently being met by utilizing personnel of nearly all aviation ratings, the inefficiencies of this manning process as discussed in Chapter II are growing in direct proportion to those advances being made in naval aircraft. There is no single aviation rating that performs all the duties and tasks for which the Plane Captain branch of Line Divisions are responsible. The present methods utilized to man many of these branches of the Line Divisions are inefficient and undesirable to both the organizations

and the personnel involved, and the attitude that the status-quo for manning Line Divisions of naval aviation units is unacceptable.

None of the alternatives or proposals for improving the procedures for manning Line Divisions as outlined in Chapter III has been implemented to date, even though the need for changes has been recognized and documented for the last decade.

A. SUMMARY

The proposal for the enhancement of the Aviation Boatswain's Mate (Handler) (ABH) rating to include those duties and tasks for which the Plane Captain branches of Line Divisions are responsible, was made in Chapter IV. This proposal could eliminate or at least alleviate many of the deficiencies associated with the present manning process, and it is the author's belief that the advantages to be gained by implementation of the proposal far outweigh any of the delineated disadvantages.

Implementation of the enhanced ABH rating would provide a specialized group of personnel trained to perform the tasks for which Line Divisions are responsible. Personnel turnover in the other work centers of the Maintenance Department could be reduced as the practice of utilizing personnel from other work centers is phased out. Personnel assigned to the Line Divisions would not be disillusioned by being assigned out of their chosen specialty, and skill deterioration and loss

of knowledge gained through experience within the aviation maintenance work force could be reduced. These and other advantages discussed in Chapter IV could be attained by implementation of the enhanced ABH rating proposal.

B. RECOMMENDATIONS

It is the author's belief that the proposal for enhancement of the ABH rating to include the duties and tasks for which Line Divisions of naval aviation units are responsible should be submitted to the Chief of Naval Personnel via the chain-of-command. Accompanying endorsements should indicate approval or disapproval with appropriate remarks. Any deficiencies of the proposal noted in the endorsements should be forwarded to the appropriate command for additional research and modification to rectify the discrepancy.

APPENDIX A

LINE DIVISION MANNING ASHORE BY PAYGRADE

	E-8	E-7	E-6	E-5	E-4	E-3/2/1	TOTAL
VT-2/3/6	1	0	2	1	3	30	37
VT-7	0	2	2	1	8	31	44
VT-9	0	1	1	0	4	12	18
VT-19	0	1	1	1	4	11	18
VT-26	1	1	3	2	12	55	74
VT-24	0	1	3	0	4	16	24
VT-25	0	1	0	1	6	20	28
VT-4	0	1	2	0	4	33	40
VT-10	0	1	2	1	4	32	40
VT-86	0	1	1	1	4	25	32
VT-22	0	1	1	1	7	40	50
VT-21	0	1	1	0	4	16	22
VT-23	0	1	2	1	10	44	58
VT-27	1	1	2	1	10	50	65
RVAW-110	0	0	1	0	5	10	16
RVAW-120	0	1	1	1	5	10	18
VA-42	0	1	2	1	4	30	38
VA-128	0	1	2	1	3	24	31
VA-129	0	1	2	2	3	20	28
VA-45	0	1	1	2	2	12	18
VA-127	0	1	1	2	2	12	18
VA-122	0	1	1	2	2	40	46

	E-8	E-7	E-6	E-5	E-4	E-3/2/1	TOTAL
VA-174	1	2	3	4	13	75	98
VF-124	1	2	2	3	3	62	73
VF-126	0	1	1	2	3	28	35
VF-101	0	1	2	2	12	40	57
VF-43	1	0	2	5	4	20	32
VF-171	0	1	1	4	6	40	52
VP-30	1	0	0	1	6	26	34
VP-31	1	1	0	2	6	26	36
VS-41	1	1	0	3	12	55	72
TOTAL	9	30	45	48	175	944	1251

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